

10/7/99

MR

8-1-7

~~arranged on the vertex of an imaginary first equilateral triangle C.~~ Namely, the locations of three LEDs 61, 62, and 63 are arranged to form an equilateral triangle configuration in which all angles are congruent. In this basic cell structure 60, the first LED 61 is red, the second LED is green, and the third LED is blue.

~~Please replace~~ ^{delete} the paragraphs beginning on page ~~4~~ ⁶, line ~~18~~ ^{11 to pg. 7 line 18} with the following annotated paragraphs:

Fig. 3A is a schematic view showing the first arrangement of basic cell structures according to the first embodiment of the present invention. Fig. 3B is a schematic view of the LEDs according to the first embodiment.

Fig. 3A illustrates how the basic cell structures 60 are disposed on the planar surface 30 in Fig. 2A. In this figure, each basic cell structure 60 is represented by an imaginary first equilateral triangle C. Any three of the basic cell structures 60 are arranged in a second equilateral triangle D. It should be noted that in Fig. 3A, the first equilateral triangle C and the second equilateral triangle D are not drawn to scale, merely showing interconnections between the basic cell structures 60.

Furthermore, the basic cell structures 60 are duplicated in a specific pattern as shown in Fig. 3A and at least 7 rows of LEDs are shown in Fig. 3B. In the first row from the top, the LEDs 61, 62, 63 are arranged from left to right in a sequence of R, G, B, R, G, B and so on. The second row is also arranged in a sequence of RGB, although, any two adjacent LEDs 61, 62 or 62, 63 in the first row and one of the LEDs in the second row, in which of in the second row has a different color than the LEDs in the first row, are arranged in the first equilateral triangle C, as

W/769,966

mentioned. Thus, three LEDs 61, 62, and 63 on the planar surface 30 must be arranged in the shape of the first equilateral triangle C, representing one basic cell structure 60.

In addition, intensity of the light produced by the basic cell structures 60 is varied by varying power to one of the LEDs 61, 62, and 63. By numerous experimental tests and analyses, in the LED arrangement of Fig. 3, the power supply to the second (green) LED must be twice that received by the first (red) or the third (blue) LEDs. As a result, the total light produced in this arrangement at the predetermined power ratio to each LED will provide optimum brightness of the LCD.

MR
8-1-7

Please replace the paragraphs on pg. 7 line 19 to pg. 8 line 19 with the following:
A second LED arrangement is shown in Figs. 3A4A and 3B4B. Fig. 3A4A is a schematic

view showing the second arrangement of basic cell structures 60 according to the second embodiment of the present invention. Fig. 3B4B is a schematic view of the LEDs 61, 62, 63 according to the second embodiment. As shown in Fig. 3A4A, three of the basic cell structures 60 are arranged in another equilateral triangle E. Unlike the first embodiment, an additional fourth LED 64 in green color is disposed in the center of the second equilateral triangle E. It should be noted that the LEDs 62 and 64 are both green. In addition, in this figure, the triangle center is an incenter, an intersection point of three internal angle bisectors on the triangle E.

In the first row of Fig. 4B3B from left to right, the LEDs 64, 61 are arranged in a sequence as follows: G, R, G, R, G, R and so on. The LEDs 62, 63 in the second row are arranged differently in a sequence of BG. Each red LED 61 in the first row and two adjacent LEDs 62, 63 in the second row, G and B LEDs are arranged in the first equilateral triangle C as shown in Fig. 2B. Thus, three LEDs 61, 62, and 63 on the planar surface 30 are formed into the first equilateral triangle C, representing one basic cell structure 60.